The risk of ill-informed reform – the future for English flood risk management

Alexander, M[1]., Priest, S. and Penning-Rowsell, E.C.

[1]Dr Meghan Alexander
Sustainability Research Institute, School of Earth & Environment, University of Leeds
Leeds, UK, LS2 9JT
Email: AlexanderM5@Cardiff.ac.uk (*corresponding author*)

Dr Sally Priest
Flood Hazard Research Centre, Middlesex University
The Burroughs, Hendon, London, NW4 4BT, UK
Email: s.priest@mdx.ac.uk

Prof. Edmund C. Penning-Rowsell
Flood Hazard Research Centre, Middlesex University
The Burroughs, Hendon, London, NW4 4BT, UK
Email: edmund@penningrowsell.com

This is the post-peer reviewed version of the following article: Alexander, M., Priest, S. and Penning-Rowsell, E.C. (In press, 2017) The risk of ill-informed reform – the future for English flood risk management. *Area*. Accepted for publication 29/08/2017.

The risk of ill-informed reform – the future for English flood risk management

Abstract
Flood risk in the UK is recognised by many as a major 21st century challenge. However Flood Risk Management (FRM) has become widely contested, with the Environment, Food and Rural Affairs (Efra) Committee recently calling for major governance reform. Engaging this debate, this commentary evaluates the extent to which such reform is necessary or wise when it appears that it may ironically, albeit inadvertently, exacerbate key criticisms of the current system.

Introduction

Flood Risk Management (FRM) has experienced intense scrutiny following significant winter flooding in 2013/14/15/16, marked by media 'trials' seeking blame and a barrage of images portraying angry flood victims confronting fleeting politician visits. In response, the "*Future Flood Prevention*" report by the Environment, Food and Rural Affairs (Efra) Committee calls for major governance reform (Efra Committee, 2016). But will the proposed changes address current concerns, or simply substitute a new set of problems?

Drawing from extensive policy and legal analysis of English FRM and over 60 interviews with flood risk professionals within the EU project "STAR-FLOOD" (http://www.starflood.eu/), this paper assesses these proposed reforms. Numerous governance design principles were identified on the basis of European cross-country comparisons (Alexander et al., 2016a; Driessen et al. 2016). However, we focus here on the central principle that only coordinated and aligned (sub)-arrangements of flood risk governance, and allied policy domains, can deliver holistic and sustainable FRM, whilst maximising the efficient use of resources (Hegger et al., 2016). Thus we directly address the Efra Committee's critique of English flood risk governance as being '*fragmented, inefficient and ineffective'* (p3) and examine their proposed remedies.

The evolution of English flood risk governance

Numerous governance arrangements for FRM have been enacted since the 1930s, increasing alignment and integration with land drainage, water management and other environmental concerns (Penning-Rowsell and Johnson, 2015). With privatisation in 1989, responsibilities for water and FRM were re-divided between water and drainage companies (operating commercially, albeit regulated by Ofwat) and the newly created National Rivers Authority (thereafter the Environment Agency (EA) in 1996), alongside other Risk Management Authorities (RMAs). To address weaknesses in the effectiveness and efficiency of FRM attributed to this fragmentation (Pitt, 2008), the Flood and Water Management Act 2010 assigned strategic responsibility to the EA to oversee FRM for all types of flooding and charged Lead Local Flood Authorities (LLFAs) with duties for surface water FRM. Additional clauses also required better coordination and collaboration across all RMAs.

Evaluating this current governance arrangement, Alexander et al. (2016a,b) emphasise the comprehensiveness of the English system and the coordination achieved through multiple types of bridging mechanisms, supporting both efficient and effective FRM. Different policy sectors (e.g. spatial planning, civil contingencies and environmental protection) have become more aligned and coordinated with the goals of FRM. Moreover, cooperation and collaboration amongst RMAs are judged to be effective and supported through numerous strategic

partnerships (e.g. Local Resilience Fora). This begs the question of whether the drastic reforms to governance now proposed are either necessary or desirable.

Proposed reform

The Efra Committee calls for a new governance model, with a National Floods Commissioner, Regional Flood and Coastal Boards and an English Rivers and Coastal Authority to replace the functions of the EA, LLFAs and current Regional Flood and Coastal Committees (RFCC) (Figure 1). These reforms target the Efra Committee's desire to i) promote long-term strategic planning for FRM; ii) improve transparency and accountability in decision-making; and iii) encourage more integrated approaches to flood and water management. They seem to signify a partial re-regionalisation of FRM (last seen prior to 1989), whilst also privatising aspects of FRM by broadening the remit of the private Water and Drainage companies.

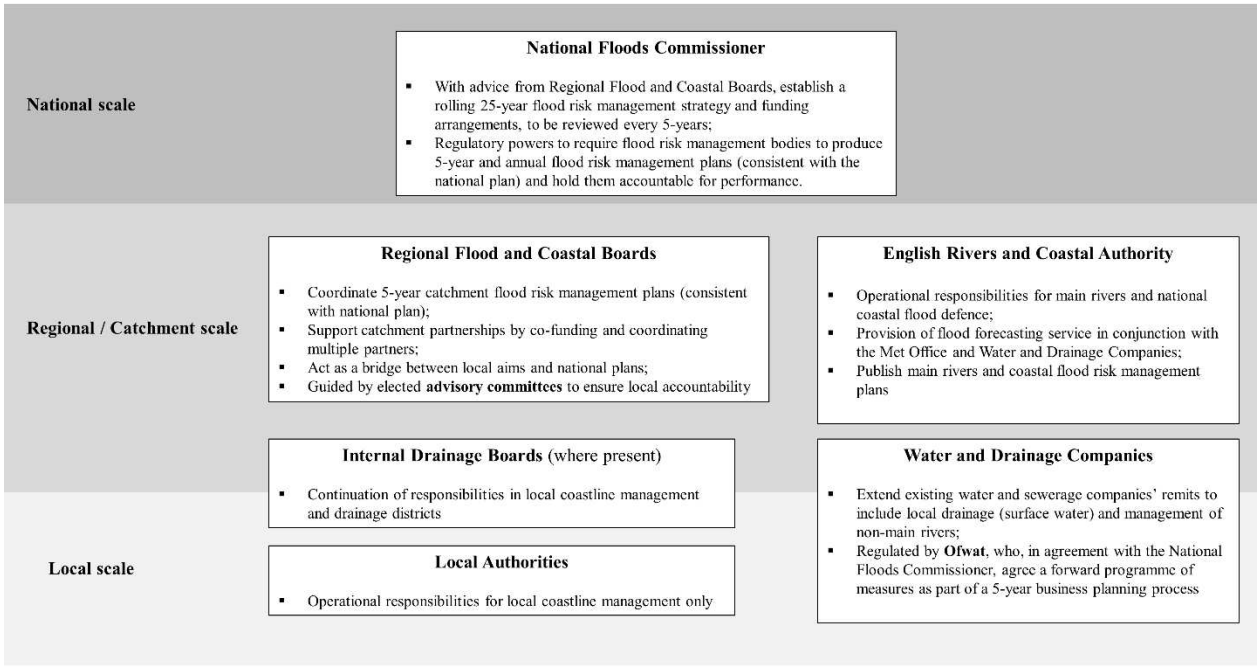

Figure 1: Proposed governance reforms for FRM in England

In theory, the proposed National Floods Commissioner might strengthen accountability within FRM through periodic performance assessments. The Commissioner would also establish 'a rolling 25 year FRM strategy for England, and [….] national funding' (Efra Committee, 2016:32) thus building upon existing practices. Indeed, there is already a statutory duty for the EA to establish a national Flood and Coastal Erosion Risk Management strategy, with which RMAs (except water companies) must act consistently. However, there is some merit in aligning this with a strategy for funding, building upon the current 6-year programme (HM Treasury, 2014; Defra, 2014) to establish more funding certainty and encourage cost savings (ASC, 2014).

However, the Department for Environment, Food and Rural Affairs (Defra) is already in the process of merging funding streams and restructuring according to hydrological catchments, to inform a 25-year environment plan. The key difference is that the proposed reforms seek to isolate responsibilities for flooding from broader environmental concerns and charge an independent individual (i.e. a non-Cabinet Minister) to produce this (Efra Committee,

2016:32). Given the non-political status and maturity of the EA it seems unlikely that objectivity is a valid concern, moreover the wealth of relevant expertise within the Agency surely makes it best placed for maintaining strategic oversight of FRM.

Regarding the Efra Committee's proposal to create Regional Flood and Coastal Boards (RFCB) it is difficult to see how these would act differently to existing RFCCs. Indeed catchment-based decision-making has been fundamental to FRM since 1930. Today, Catchment Flood Management Plans and Shoreline Management Plans detail strategic long-term objectives for FRM and inform the allocation of resources (EA 2009a, 2009b). A key difference vis-à-vis RFCCs, is that RFCBs would take on a greater role in regional FRM planning (coinciding with water company boundaries), as well as providing greater support for catchment partnerships. However, this RFCB proposal appears more an exercise in re-branding rather than offering fundamental change.

The Efra Committee also proposes that existing EA flood functions are siphoned off to a newly created English Rivers and Coastal Authority (ERCA) to allow '*a strong delivery culture to be developed for river and coastal defences'* (p33). Here again, we would voice some concern. The EA was established on the premise that holistic environmental management is needed to deliver the goals of sustainable development. An emphasis only on defence has long gone: instead, aligning land (e.g. land use planning, environmental management) and water issues (i.e. flood, water resources and water quality) at the catchment scale, has the potential to deliver multiple benefits and maximise resource efficiency (Dadson et al., 2017). The Efra Committee believes that their proposed reform will better support 'whole catchment' approaches, when in fact it risks FRM being treated as an isolated policy silo and may actually make integration with other catchment-based issues more challenging.

The final suggestion is to extend the roles of water companies and subsume current LLFA responsibilities for managing non-main rivers and surface water. There is some logic to assigning responsibilities to water companies where drainage expertise is established, especially given the 'deskilling' that has occurred in local authorities (Pitt, 2008). Whilst local authorities have sought to address this gap, this has proved challenging and further exacerbated by public expenditure cuts. However if the introduction of integrated Water and Drainage Companies is to be the way forward then serious questions need to be asked about the appropriateness of transferring these duties to a private industry. This model of FRM governance is reliant on regulatory pressure and a careful balance of market principles that is currently largely untested.

Furthermore, other RMAs have discussed the challenge today of working alongside this quasi-commercial mode of governance (see Alexander et al., 2016b). The principal interest in commercial gain and customer and shareholder satisfaction was seen to be linked to risk avoidance and constraints on willingness (and ability) to invest in alternative, sustainable drainage solutions. Moreover, there is no mandatory duty for water companies to act consistently with FRM strategies under current legislation. Therefore, it appears that further provisions are required to better incentivise water companies to assist the goals of FRM if the system is to remain the same as now. Another factor to consider is the integral and legitimate role that local authorities play in other aspects of FRM, namely in spatial planning (i.e. reducing the build-up of future risk) and emergency management. Given the interconnectivity between these issues and strong local grounding, the proposal to strip LLFAs of their responsibilities for non-main rivers and surface water management appear unjustified.

Interestingly, despite its critique of fragmented governance, the Efra Committee states that current remit of Internal Drainage Boards (IDB) will remain. Moreover, local authorities will retain responsibilities for local shoreline management. The report further omits a discussion about riparian responsibilities and whether these too should be subsumed by new institutions. This is a particularly pertinent issue given that common law responsibilities are poorly understood and non-compliance can prove costly (Alexander et al., 2016b). On these matters, it is not clear how the reforms will truly resolve the supposed excessive complexity and confusion of the existing arrangement.

Moving forward

This article challenges the Efra's Committee's assessment of current flood risk governance as being "fragmented, inefficient and ineffective", on two grounds. Firstly, the current English system has considerable strengths (Alexander et al., 2016b; Driessen et al., 2016), suggesting that the Efra Committee's criticisms may be ill-informed and exaggerated.

Secondly, we challenge the extent to which the proposed reforms could actually solve perceived or actual issues of fragmentation, inefficiency and ineffectiveness. In particular, the Efra Committee appears to prioritise the goals of integrated water management above the integration of FRM with the environment. Here, the proposed reforms risk positioning flood/water management in a policy silo and in turn threaten the current coordination between allied policy domains, essential for delivering whole catchment-based approaches. Moreover, the Efra Committee's plan to remove certain responsibilities from local authorities fails to acknowledge the legitimate role they currently play in multiple aspects of FRM and the drawbacks of fragmenting these.

In this light, the Efra Committee's plans to better integrate flood and water management threaten to create fragmentation in other aspects of FRM, potentially creating new inefficiencies and governance ineffectiveness. Therefore, whilst we recognise that there is scope for improvement in FRM we challenge the necessity of major reform and argue that these may inadvertently exacerbate, rather than alleviate, key criticisms of the current system.

References

Adaptation Sub-Committee of the Committee on Climate Change (ASC; CCC) (2014) Managing climate risks to well-being and the economy –ASC Progress Report 2014. CCC: London

Alexander, M., Priest, S. and Mees, H. (2016a) A framework for evaluating flood risk governance. *Environmental Science and Policy*,64,38-47

Alexander, M., Priest, S., Micou, A.P., Tapsell, S., Green, C., Parker, D., and Homewood, S. (2016b) *Analysing and evaluating flood risk governance in England.* London: Flood Hazard Research Centre, Middlesex University

Dadson, S.J., Hall, J.W., Murgatroyd, A., Acreman, M., Bates, P., Beven, K., Heathwaite, L., Holden, J., Holman, I.P., Lane, S.N., O'Connell, E., Penning-Rowsell, E., Reynard, N., Sear, D., Thorne, C. and Wilby, R. (2017) A restatement of the natural science evidence concerning catchment-based 'natural' flood management in the UK. *Proc. R. Soc. A. DOI: 10.1098/rspa.2016.0706*

Department for Environment, Food and Rural Affairs (Defra) (2014) *Reducing the risks of flooding and coastal erosion: An investment plan*. London: Defra.

Driessen, P.J., Hegger, D.L.T., Bakker, M.H.N., van Rijswick, H.M.W. and Kundzewicz, Z.W. (2016) Toward more resilient flood risk governance. *Ecology and Society*,21(4),53.

Environment, Food and Rural Affairs Committee (2016) *Future flood prevention*. London: House of Commons.

Environment Agency (2009a) *Catchment Flood Management Plans: Collection.* Bristol: EA.

Environment Agency (2009b) *Shoreline Management Plans (SMPs). Policy paper.* Bristol: EA.

Hegger, D., Driessen, P., and Bakker, M. (eds) (2016) *A view on more resilient flood risk governance: key conclusions of the STAR-FLOOD project*. Utrecht: The Netherlands. ISBN: 978-94-91933-13-4.

HM Treasury (2014) *National Infrastructure Plan 2014*. London: HMT.

Penning-Rowsell, E.C. and Johnson, C. (2015) The ebb and flow of power: British flood risk management and the politics of scale. *Geoforum*,62,131-142.

Pitt M (2008) *Learning lessons from the 2007 floods. The Pitt Review*. LONDON: Cabinet Office.